

MONITORING REPORT

CC DOCKET NO. 98-202

DECEMBER 1998

Prepared by Federal and State Staff for the

Federal-State Joint Board in

CC Docket No. 96-45

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Monitoring Report
CC Docket No. 98-202
December 1998

Introduction and Summary

This is the first report in a series of reports monitoring the impact of universal service support mechanisms, and the methods used to finance them. These mechanisms were adopted by the Federal Communications Commission (Commission), based on recommendations from the Federal-State Joint Board in CC Docket No. 96-45 (Universal Service Joint Board). These reports are part of a new monitoring program created by the Commission in 1997¹ to replace the similar program in CC Docket No. 87-339. This new program incorporates most of the information that was collected under the previous program, and also new materials from the reports of the administrator of the universal service support mechanisms, the Universal Service Administrative Company (USAC). To enhance our monitoring ability, we have created a new open docket² which allows data, materials, comments, and studies to be submitted at any time.

The monitoring program has proven to be valuable, not only as a report on the effects of regulatory changes, but also as a complete census of all incumbent local exchange carriers. Because smaller carriers generally are exempt from most Commission reporting requirements, the Monitoring Report incorporates data from several sources, including the National Exchange Carrier Association (NECA) and USAC. NECA, at the direction of the Commission, collects information in order to administer the access charge pools and to provide information to USAC to help administer the Universal Service Fund. USAC also collects information from all eligible carriers to administer the universal service support mechanisms. The Monitoring Report, therefore, contains the most comprehensive data on all incumbent local exchange carriers, containing data on such matters as the number of telephone lines, calling volumes, and certain types of costs.

This report presents data for the eleven subject categories selected for monitoring. The first section is about the contributions to the universal service support mechanisms and industry revenues, on which those contributions are now based. The next four sections are about the various support mechanisms: low income support; high cost support; schools and libraries support; and rural health care support. The remaining six sections provide information on matters that might be affected by the support mechanisms: subscribership and penetration; rates and price indices; network usage and growth; quality of service; infrastructure; and revenues, expenses and investment. Sections 2, 3, 6, 7, 8, 10, and 11 contain information that had previously been

1 *Federal-State Joint Board on Universal Service*, Report and Order, CC Docket No. 96-45, FCC 97-157, para. 869 (released May 8, 1997).

2 CC Docket No. 98-202.

included in the Monitoring Reports in CC Docket No. 87-339.³ Sections 1, 4, 5, and 9 contain entirely new material.

The following are highlights of some of the material in this report. Section 1 provides the first report on contributions to the universal service support mechanisms, and the industry revenues on which they are based. Section 2 includes data through November 1998 on the Lifeline and Link-Up America programs. Section 3 includes data from the October 1, 1997, NECA universal service fund filing, a summary of four years of revised historical data, and a table showing study area changes in the last four years. It also includes 1997 information on the NECA pools. In addition, it includes projected 1998 payments for all of the high cost support programs, based on the quarterly reports from USAC. Section 4 includes a description and status report of the schools and libraries support. Section 5 includes a description and status report of the rural health care support. Section 6 includes Census data on subscribership through March 1998. It also includes updated information on telephone penetration by income by state. Section 7 includes updated Consumer Price Index and Producer Price Index data and other updated rate information. Section 8 includes 1996 NECA network usage data and five years of revised historical data. Section 9 includes data on the quality of service from the Commission's Automated Reporting Management Information System (ARMIS) reports. Section 10 includes data through 1997 on infrastructure from the ARMIS reports. Section 11 includes information on revenues, expenses and investment for 1997 from the ARMIS reports.

This report is based on information available to us as of September 30, 1998, although in many instances we have been able to incorporate some information made available after that date. This entire report is available electronically through the **FCC-State Link** internet site, which can be reached at <http://www.fcc.gov/ccb/stats> on the World Wide Web. It is available in both page image (.pdf) format and in a compressed (.zip) format, which, when unzipped yields word processing and spreadsheet files. In addition, information received well in advance of the next Monitoring Report will be made available on an interim basis in separate staff reports or in raw data files (such as most NECA filings used in the Monitoring Report) on the internet site. In addition, the ARMIS data are available on the ARMIS internet site, which can be reached at <http://www.fcc.gov/ccb/armis/db/>. The **FCC-State Link** electronic bulletin board, which can be reached by dialing (202) 418-0241 with a computer modem, also contains these materials.

3 Section 2 of this report corresponds to section 2 of the previous Monitoring Reports. Section 3 of this report includes material from sections 3 and 7 of the previous reports. Section 6 of this report corresponds to section 1 of the previous reports. Section 7 of this report corresponds to section 5 of the previous reports. Section 8 of this report corresponds to section 4 of the previous reports. Section 10 of this report corresponds to section 8 of the previous reports. Section 11 of this report corresponds to section 6 of the previous reports.

For ease of public reference, we ask that parties submitting materials for this docket provide a duplicate copy to the Public Reference Room of the Common Carrier Bureau,⁴ where copies of all materials filed in the docket are available for public reference.

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1. Industry Revenues and Contributions

This section provides a general overview of the revenues of the U.S. telecommunications industry and the contributions to the universal service support mechanisms that are based on these revenues. Most of the information for 1997 comes from worksheets containing 1997 revenue data that carriers filed with the administrator of the universal service support mechanism. By Sept 22, 1998, the universal service database contained whole year 1997 data for 2,267 contributing service providers. Many carriers, however, were exempted from universal service filing requirements because their potential contributions to the universal service support mechanisms were expected to be "de minimis" - that is, their contribution for the year was expected to be less than \$10,000. To fill out the industry totals, data was added from a separate source -- worksheets filed in connection with Telecommunications Relay Services (TRS)¹. Data for 1,138 additional carriers were taken from this source. As shown in Table 1.1, about 99% of telecommunications revenue was reported by carriers that contribute to universal service support mechanisms.

Tables 1.2 and 1.3 compare 1997 revenue with revenue for prior years. Revenue data shown for 1992 through 1996 are derived from information filed on TRS worksheets.

Universal service requirements include several mechanisms that help ensure that all Americans have access to affordable telecommunications service. In section 254(d) of the Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 *codified* at 47 U.S.C. §§ 151 *et seq.*, Congress mandated that "[e]very telecommunications carrier that provides interstate telecommunications services shall contribute, on an equitable and nondiscriminatory basis, to the specific, predictable, and sufficient mechanisms established by the Commission to preserve and advance universal service." The Commission adopted funding mechanisms in a Report and Order, FCC 97-157, CC Docket No. 96-45, 12 FCC Rcd 8776 (rel. May 8, 1997). The Commission subsequently selected the Universal Service Administrative Company (USAC) as the interim administrator. Carriers first filed Universal Service Worksheets on September 1, 1997, for the first half of 1997.

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- 1 Telecommunications relay service is a telephone transmission service that allows persons with hearing or speech disabilities to use the telephone. The Americans with Disabilities Act of 1990 requires all providers of interstate telecommunications service to share in the costs of financing the provision of interstate TRS. In order to meet this mandate, the FCC adopted a TRS funding mechanism in the Third Report and Order in CC Docket No. 90-571, 8 FCC Rcd 5300 (rel. July 20, 1993). The FCC established a TRS fund and directed the National Exchange Carrier Association (NECA) to serve as the Administrator. Each carrier that provides interstate service must file an annual TRS Fund Worksheet with the TRS administrator. The worksheet summarizes a carrier's revenues and is used by the carrier to calculate its required contribution to the TRS fund.

Most large carriers file semi-annual FCC Form 457 Universal Service Worksheets. The 1998 Universal Service Worksheets provide the most detailed information on telecommunications industry revenue available from any source. Summaries of these worksheets form the core of Tables 1.4, 1.5 and 1.6. Over 1,000 carriers, however, did not file Universal Service Worksheets because their contributions were de minimis. More limited data were obtained for these carriers from annual FCC Form 431 Telecommunications Relay Service Fund Worksheets.

Table 1.7 shows how carrier revenue data and program requirements information were combined to determine the contribution factors used to bill carriers during 1998.

Revenue Data

Almost all telecommunications carriers are considered to be interstate service providers. Local telephone companies are classified as interstate service providers because they provide interstate access services. Similarly, competitive access providers, pay telephone operators, and cellular telephone companies derive revenue from providing access to interstate services and accordingly file worksheets. Virtually all pay telephone providers, interexchange carriers (IXCs), operator service providers (OSPs), and toll resellers provide interstate services. Special mobile radio (SMR) and private paging providers offer dispatch, paging, and some telephone services. At one time, SMRs were not regulated as carriers and did not have to contribute to the provision of TRS. SMRs were first required to file TRS Worksheets in 1996. Private carriers are subject to universal service support mechanism contribution requirements but not to TRS contribution requirements.

Carriers subject to the universal service support mechanisms contribution requirement were required to file worksheets on March 31, 1998, containing revenue data for the whole year 1997. TRS Worksheets for 1997 were due on April 26, 1998. Some carriers filed late or filed subsequent revisions. The data shown in Tables 1.1 through 1.6 are based on information in the database as of September 22, 1998. Thus, the totals are slightly different from the totals actually used to calculate contribution factors. Some carriers undoubtedly did not file either Universal Service or TRS Worksheets. These carriers represent a small fraction of industry revenue.

Both the universal service and TRS support mechanisms require each legal entity that provides interstate telecommunications service to file a separate worksheet. Several wireless carriers, however, received permission to make consolidated universal service filings in situations where they maintain separate legal entities because their spectrum licenses have different groups of owners, but where a single entity managed the combined operations.

In the Universal Service Worksheet, each filer is required to report total and interstate revenues in two broad categories: service provided to other Universal Service Worksheet filers for resale (carrier's carrier); and, service to de minimis carriers and end users (end user). Carriers must provide further breakdowns of local, wireless, and toll services. TRS contributions are based on a carrier's gross interstate revenue (which includes both carrier's carrier and end user revenue). Universal service contributions to the universal service support mechanisms are based

on a carrier's end user revenues. One category of end user telecommunications revenue -- toll calls that both originate and terminate outside of the United States, primarily call-back and World Direct type service -- is excluded from universal service contribution bases.

The Universal Service and TRS Worksheets require each filer to categorize itself using one of the following categories:²

- Competitive Access Provider (CAP) or Competitive Local Exchange Carrier (CLEC)
- Cellular, Personal Communications Service (PCS) and Specialized Mobile Radio (SMR) Wireless Telephony Service Provider
- Incumbent Local Exchange Carrier (ILEC)
- Interexchange Carrier (IXC)
- Local Reseller
- Operator Service Provider (OSP)
- Other Local
- Other Mobile Service Carrier
- Other Toll Service Provider
- Paging and Messaging
- Pay Telephone Provider
- Private Service Provider
- Pre-paid Calling Card Provider
- Satellite Service Provider
- Shared Tenant Service Provider
- Special Mobile Radio - Dispatch
- Toll Reseller
- Wireless Data Service Provider

Fewer carrier categories were listed on prior year worksheets. In a few cases, carrier categories were combined for tabulation purposes.

Table 1.1 summarizes total industry revenue and shows the breakdown by source of the data -- how much of the revenue was reported on Universal Service Worksheets and how much on TRS Worksheets. The Universal Service Worksheets were the source of 99% of reported revenues. The table shows breakdowns for local, wireless, and toll service; it also shows how much of the revenue was reported as intrastate service versus interstate service and how much of the revenue was reported as carrier's carrier revenue versus end user revenue. Carriers reported a total of \$231.2 billion of telecommunications revenue. Carriers are making contributions to the universal support mechanisms on \$186.0 billion of total end user revenue and

2 For detailed definitions of the categories and worksheet instructions, see *Telecommunications Industry Revenue: 1997* (FCC CCB Industry Analysis Division, released October 8, 1998).

\$69.3 billion of interstate end user revenue. Carriers are making TRS contributions on \$97.5 billion of gross interstate revenue. In both cases the term "interstate" includes domestic interstate calls as well as international calls.

Carriers were instructed to report the amounts actually billed to customers. This means that carriers should report revenue net of discounts, but without making any adjustments to reflect uncollectible revenue or international settlement payments. Most filers should be able to report revenue in this manner using information contained in their corporate books of account. Some filers, however, have no business or regulatory requirements to record intrastate revenues separately from interstate revenues or to use the detailed revenue categories contained in the worksheets. Therefore, breakdowns are likely to be less accurate than industry totals. Some carriers reported unlikely amounts, such as *intrastate* toll revenue for calls both originated and terminated outside the United States. Similarly, some carriers report negative billed revenues. The totals reflect some corrections based on supplemental carrier information.

Table 1.2 provides historic data for several categories of revenue. Because of reporting changes, the 1997 totals are not entirely consistent with data for prior years. For example, special access revenues were included with other access revenues in 1996 but are included with local private line service in 1997. Similarly, through 1996, carriers reported as other local and mobile revenue substantial amounts of customer premises, billing and collection and other types of revenue that are excluded from contributions to the universal service support mechanisms. These revenues are now reported as non-telecommunications. Table 1.2 contains estimates of the amounts of non-telecommunications revenues that had been reported in prior years. The table estimates that 1996 telecommunications revenues reported on TRS Worksheets would have been \$10.5 billion lower if revenue had been reported using Universal Service Worksheet instructions.

Table 1.3 provides historic revenues for several classes of carriers. Changes in reporting are relatively unimportant for toll carriers and for local service competitors. As explained above, however, the 1996 data contains about \$10.5 billion of non-telecommunications revenues, almost all of which were reported by incumbent LECs and wireless carriers.

Table 1.4 provides an overview of the local, mobile, and toll service revenues for selected groups of carriers.

Table 1.5 provides a detailed breakout for each of the universal service revenue categories and some breakout for data taken from TRS Worksheets.

Table 1.6 provides universal service and TRS revenue detail by class of filers.

The universal service and TRS rules prohibit the fund administrators from releasing information contained in the worksheets. Worksheet revenue data for individual carriers are not available to the public.

Program Requirements and Contribution Factors

Once the Universal Service Administrator collects and tabulates end user revenue data, the Commission reviews program requirements and determines the contribution factors. Carriers filed revenue data for the first half of calendar 1997 on September 1, 1997. On December 16, 1997, the Commission released approved contribution factors to be used to determine carrier contributions for the first quarter of calendar 1998.³

The Public Notice released two factors. The first factor was the schools and libraries and rural health care support contribution factor, which was 0.0072. Carrier contributions to these support mechanisms for the first quarter of 1998 were determined by multiplying 0.0072 times one half of total end user revenue from intrastate, interstate and international telecommunications services billed in the first half of 1997. The second factor was the high cost and the low income support contribution factor, which was 0.0319. Carrier contributions to these support mechanisms for the first quarter of 1998 were determined by multiplying 0.0319 times one half of total end user revenue from interstate and international telecommunications services billed in the first half of 1997.

Revenue information from the September 1 filings was also used as the basis for determining contributions for the second calendar quarter of 1998. On March 31, 1998, carriers filed revenue data for whole calendar year 1997. The Universal Service administrator determined second half 1997 revenues for each carrier by subtracting the carrier's first half revenues contained in its September 1 filing from the carrier's whole year revenues contained in its March 31 filing. Second half 1997 data were used as the basis for contributions billed in the third and fourth calendar quarters of 1998. In summary, carriers file first half revenue on September 1. This information is used to determine contributions for the first two quarters of the following year. Carriers file whole year data on the following March 31. First half data are subtracted from whole year data and the result -- second half revenue data -- is used to bill contributions to be made in the third and fourth quarters.

Table 1.7 shows the contribution base and program requirement information used to calculate the fund factors for 1998. If all carriers provided correct data on the filing dates, end user revenue totals would be the same for the first two and last two quarters of the year. The revenue totals changed over time because of late filings and corrections. Starting in the fourth quarter, the Commission reduced the amounts in the contribution bases by 1% to reflect the fact that some contributions will prove uncollectible.

Table 1.7 also shows the actual amounts billed for contributions in each quarter. These amounts represent actual billings made during the quarter and include some prior quarter obligations where there have been late filings and corrected filings. Actual collections vary from

3 Public Notice, First Quarter 1998 Universal Service Contribution Factors Revised and Approved, CC Docket No: 96-45; DA 97-2623.

the amounts shown in the table due to late payments, carrier bankruptcies, and interest charged on late payments.

Table 1.7 shows separate lines for refunds. Refunds are shown as negative billed contributions. The Commission modified the de minimis threshold in 1998. The decision was released before the Universal Service administrator sent bills for contributions, so no carrier with projected billings below \$10,000 for the year received a bill. Some companies, however, filed revised worksheets which changed their contribution base such that they did qualify for the de minimis exemption. These companies have been issued refunds. Other companies did not pass the de minimis test contained in the worksheet but will be billed less than \$10,000 in 1998, given the actual contribution factors that have been authorized. Refunds for these carriers are shown for the fourth quarter of 1998.

Finally, Table 1.7 shows outlays for programs actually approved during the quarter. These figures do not include actual administrative expense. Similarly, the data in the table do not show actual interest received. Thus far, there have been no approved outlays for schools and libraries or for rural health care support. Outlays are expected for the fourth quarter but estimates for the totals are not yet available.

Table 1.1: Total Telecommunications Industry Revenue: 1997
(Amounts shown in millions)

	Universal Service Worksheet Data			TRS Worksheet Data ***	Total
	Carrier's Carrier Revenue *	End User Revenue *	International - to - International Revenue **		
Local Service	\$28,122	\$68,709	\$0	\$595	\$97,426
Wireless Service	2,736	30,024	2	189	32,951
Toll Service	11,401	87,298	559	1,532	100,791
Service reported as Intrastate	16,097	116,757	18	783	133,654
Interstate	26,163	69,274	543	1,535	97,514
Total	\$42,260	\$186,030	\$561	\$2,317	\$231,168

Note: Detail may not add to totals due to rounding.

- * Carrier's carrier revenue is reported on Universal Service Worksheets as sales to other universal service contributors for resale. This includes, for example, access services that local exchange carriers provide to toll carriers. Sales to de minimis carriers, customers, governments, non-profits and any other non-contributors are treated as end user revenue. Filers contribute to the universal service funding mechanisms based on their end user revenues.
- ** Revenue from calls that both originate and terminate in foreign points are reported as end user revenue, but are not included in the universal service contribution bases.
- *** Totals are shown for carriers that are not included in the database of universal service contributors as of September 22, 1998, but did file a TRS Worksheet in 1998. Virtually all of these carriers met the de minimis test and were not required to contribute to the maintenance of universal service in 1998.

Table 1.2: Telecommunications Industry Revenue by Service
(Amounts shown in millions)

	TRS Data					Universal Service & TRS Data
	1992	1993	1994	1995	1996	1997
Local Exchange Pay Telephone *	\$39,235	\$40,176	\$42,245	\$45,194	\$48,717	\$53,771
Local Private Line **	1,049	1,088	1,138	1,226	1,616	2,182
Other Local ***	7,687	8,002	8,302	10,428	10,543	8,282
Subscriber line charges **						2,847
Access **	29,353	30,832	32,759	33,911	35,641	8,327
Additional revenue from TRS Worksheets						21,423
						595
Total Local Service	77,324	80,098	84,443	90,759	96,516	97,426
Total Wireless Service (including additional revenue from TRS Worksheets)	7,285	10,237	14,293	18,759	26,049	32,950
Operator *	9,465	10,772	10,539	11,170	10,975	12,002
Non-Operator Switched Toll	54,300	58,294	60,819	64,431	71,467	69,475
Long Distance Private Line	7,783	8,067	9,043	9,719	10,665	10,504
Other Long Distance	4,196	5,392	4,078	4,309	6,583	7,280
Additional revenue from TRS Worksheets						1,532
Total Toll Service	75,744	82,525	84,478	89,629	99,691	100,793
Non-telecommunications formerly reported as other local and wireless ***	(6,944)	(7,518)	(8,324)	(9,071)	(10,474)	
Total Telecommunications ***	153,409	165,342	174,890	190,076	211,782	231,168
Non-Telecommunications ***						25,633
Total Reported Revenue	\$160,353	\$172,860	\$183,214	\$199,147	\$222,256	\$256,801
Service reported as:						
Intrastate	89,323	96,927	102,603	112,923	127,849	133,654
Interstate	71,030	75,933	80,611	86,224	94,407	97,514

Note: Some data for prior years have been revised. Detail may not add to totals due to rounding.

- * TRS filers generally reported pay telephone revenue as local service revenue, access revenue or operator toll revenue. The Universal Service Worksheet contains a separate category for pay telephone revenue.
- ** TRS Worksheet filers generally reported special access revenue as access revenue. Universal Service Worksheet filers are asked to combine special access revenue with local private line revenue. This explains the jump in local private line revenue and the fall in access revenue shown for 1997. TRS Worksheet filers included subscriber line charges with other access charges. Universal Service Worksheet filers report subscriber line charges in a separate category.
- *** Significant amounts of enhanced service, billing and collection, CPE and other non-telecommunications revenues were reported in the TRS mobile and other local service categories through 1996. Universal Service Worksheet filers report these revenues in the non-telecommunications category. For prior years, the amounts of non-telecommunications revenue reported as mobile and other local revenue were estimated as 70% of the amounts that Tier 1 LECs reported in ARMIS as Miscellaneous and Nonregulated revenues (currently Account 5200 + Account 5280) and 10% of amounts reported as mobile service revenue.

Table 1.3: Telecommunications Revenue Reported by Type of Carrier
(Amounts shown in millions)

Service Provider Category *	TRS Worksheet Categories					Universal Service & TRS Data
	1992	1993	1994	1995	1996	1997
Incumbent Local Exchange Carriers **	\$91,584	\$95,228	\$98,431	\$102,820	\$107,905	\$105,154
Pay Telephone Providers	183	175	300	349	357	933
Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs)	69	191	281	623	1,011	1,919
Local Resellers						206
Other Local Exchange Carriers						157
Private Carriers						112
Shared Tenant Service Providers						87
Competitors of ILECs	69	191	281	623	1,011	2,481
Local service providers	91,835	95,595	99,011	103,792	109,273	108,568
Cellular Service Carriers & Personal Communications Service (PCS) **	6,718	9,215	13,259	17,208	23,778	29,944
Paging Service Providers **						2,861
SMR dispatch and Other Mobile Service Providers	670	964	938	1,419	2,121	225
Wireless Service Providers	7,387	10,179	14,197	18,627	25,900	33,030
Interexchange Carriers (IXCs)	57,341	61,118	66,381	70,938	79,057	79,080
Operator Service Providers (OSPs)	558	695	536	500	461	603
Prepaid Calling Card Providers				16	238	519
Satellite Service Carriers						1,011
Toll Resellers	1,293	1,869	2,840	4,220	6,564	8,010
Other Toll Carriers	2,186	711	709	773	577	348
Toll Service Providers	61,378	64,393	70,466	76,447	86,896	89,570
Non-telecommunications revenue in prior year data **	(6,944)	(7,518)	(8,324)	(9,071)	(10,474)	
Other Adjustments ***	(248)	2,693	(461)	280	187	0
Total Telecommunications Revenue	\$153,409	\$165,342	\$174,890	\$190,076	\$211,782	\$231,168

* Filers are asked to select for themselves a service provider category that best describes their operations. The choices have changed over the years. For example, most satellite service providers identified themselves as "Other Toll Carriers" in their 1997 TRS Worksheets because there was no separate category for satellite service providers.

** Significant amounts of enhanced service, billing and collection, CPE and other non-telecommunications revenues were reported on TRS Worksheets by Incumbent Local Exchange carriers (ILECs) and wireless carriers through 1996. Universal Service Worksheet filers report these revenues in the non-telecommunications category. For prior years, the amounts of non-telecommunications revenue reported as mobile and other local revenue were estimated as 70% of the amounts that Tier 1 ILECs reported in ARMIS as miscellaneous and nonregulated revenues (currently Account 5200 + Account 5280) and 10% of amounts reported as mobile service revenue.

*** Other Adjustments include some amounts withheld to preserve confidentiality and revisions made after the initial publication of the data.

**Table 1.4: Local, Mobile and Toll Service Revenue Reported by
Selected Types of Service Provider for 1997***
(Amounts shown in millions)

1997	Type of Service			
	Local	Mobile	Toll	All Service
Incumbent Local Exchange Carriers	\$94,347	\$591	\$10,215	\$105,154
Pay Telephone Providers	624	0	309	933
All other local service providers	<u>1,804</u>	<u>127</u>	<u>550</u>	<u>2,481</u>
Local service providers	96,776	718	11,074	108,568
Wireless Telephone Carriers	78	28,767	1,100	29,944
All other wireless service providers	<u>5</u>	<u>3,026</u>	<u>55</u>	<u>3,086</u>
Wireless service providers	83	31,792	1,155	33,030
Interexchange Carriers	234	378	78,469	79,080
Toll Resellers	269	59	7,682	8,010
All other toll service providers	<u>64</u>	<u>3</u>	<u>2,414</u>	<u>2,480</u>
Toll service providers	567	439	88,564	89,570
Total Industry	\$97,426	\$32,950	\$100,793	\$231,168

Note: Detail may not add to totals due to rounding.

* Source: telecommunications revenue data filed on Universal Service and TRS Worksheets.

Revenue for Telecommunications Service Providers that filed a Universal Service Worksheet or a TRS Worksheet			Table 1.5: Revenue by Service Category for 1997 (Amounts shown in millions)											
			Sales by Local Service Providers			Sales by Wireless Service Providers			Sales by Toll Service Providers			Sales by All Reporting Companies		
			Intrastate	Interstate	Total	Intrastate	Interstate	Total	Intrastate	Interstate	Total	Intrastate	Interstate	Total
FCC 457 Line #														
Universal Service Worksheet Data:														
Carrier's Carrier Revenue -- Service provided to other universal service contributors for resale														
Fixed local service:														
Monthly service, local calling, connection charges, vertical features, inside wiring maintenance, and other local exchange service:														
22 a	Provided as unbundled network elements	\$49.6		\$49.6	\$1.4		\$1.4	\$2.7		\$2.7	\$53.6		\$53.6	
22 b	Provided under tariffs or arrangements other than unbundled network elements	360.0	\$17.3	377.3	0.1	\$0.1	0.2	13.8	\$3.4	17.3	374.0	\$20.8	394.8	
Per minute charges for originating or terminating calls														
23 a	Provided as unbundled network elements or other contract arrangement	93.2		93.2	16.3		16.3	0.8		0.8	110.3		110.3	
23 b	Provided under state or federal access tariff	8,275.1	13,004.3	21,279.4	11.2	1.8	13.0	17.8	2.2	20.0	8,304.2	13,008.2	21,312.4	
24	Local private line & special access	933.1	3,595.7	4,528.9	*	0.2	0.2	10.5	2.5	13.0	943.6	3,598.4	4,542.1	
25	Pay telephone compensation from toll carriers	246.5	51.6	298.1	1.6		1.6	1.2	1.3	2.5	249.3	52.9	302.2	
26	Other local telecommunications service revenues	216.7	30.0	246.7	*	*	*	15.1	1.1	16.2	231.8	31.1	262.9	
27	Universal service support revenue	354.3	788.9	1,143.2		0.6	0.6				354.3	789.5	1,143.9	
Total fixed local service provided for resale			10,528.5	17,487.8	28,016.4	30.7	2.7	33.4	62.0	10.5	72.4	10,621.2	17,501.0	28,122.2
Mobile service (including wireless telephony, paging & messaging, and other mobile services):														
28	Monthly, activation, and message charges except toll	230.4	2.0	232.4	2,335.5	166.6	2,502.1	1.6	*	1.6	2,567.5	168.7	2,736.2	
Toll service:														
29	Operator and toll calls with alternative billing arrangement (credit card, collect, international call-back, etc.)	52.5	32.0	84.6	19.2	2.8	22.0	122.1	539.3	661.4	193.8	574.2	768.0	
30	Other switched toll service (includes MTS, 800/888 service, etc.)	275.6	32.1	307.6	76.7	98.2	174.8	1,648.6	5,283.5	6,932.1	2,000.8	5,413.7	7,414.5	
31	Long distance private line services	31.1	28.4	59.5	0.4	0.2	0.6	363.7	860.4	1,224.0	395.1	889.0	1,284.1	
32	Satellite services	1.2	15.0	16.2				0.1	567.9	567.9	1.3	582.8	584.2	
33	All other long distance services	131.4	13.2	144.6	5.1	0.5	5.6	180.6	1,019.8	1,200.4	317.2	1,033.4	1,350.6	
Total toll service provided for resale			491.8	120.7	612.6	101.4	101.7	203.0	2,315.0	8,270.8	10,585.8	2,908.2	8,493.2	11,401.4
Total Carrier's Carrier Revenue: service provided to other universal service contributors for resale			11,250.8	17,610.6	28,861.3	2,467.6	271.0	2,738.5	2,378.6	8,281.3	10,659.9	16,096.9	26,162.9	42,259.8

Revenue for Telecommunications Service Providers that filed a Universal Service Worksheet or a TRS Worksheet		Table 1.5: Revenue by Service Category for 1997 (Amounts shown in millions) - continued -											
		Sales by Local Service Providers			Sales by Wireless Service Providers			Sales by Toll Service Providers			Sales by All Reporting Companies		
		Intrastate	Interstate	Total	Intrastate	Interstate	Total	Intrastate	Interstate	Total	Intrastate	Interstate	Total
FCC 457 Line #													
Universal Service Worksheet Data: End User Revenue -- Services provided to end users and to non-contributing carriers													
Fixed local service:													
34	Monthly service, local calling, connection charges, vertical features, inside wiring maintenance, and other local exchange service charges except for tariffed subscriber line charges	\$51,902.0	\$13.3	\$51,915.3	\$36.4	\$2.0	\$38.4	\$217.3	\$7.9	\$225.2	\$52,155.8	\$23.1	\$52,178.9
35	Tariffed subscriber line charges	172.6	8,147.0	8,319.6	0.1	1.0	1.1	5.6	0.6	6.2	178.3	8,148.6	8,326.9
36	Local private line and special access service	2,366.3	1,353.3	3,719.6	0.1	*	0.1	10.0	9.9	19.9	2,376.4	1,363.2	3,739.6
37	Pay telephone coin revenues	1,827.5	40.6	1,868.1	0.2	*	0.2	5.2	5.9	11.1	1,832.9	46.5	1,879.4
38	Other local telecommunications service revenues	2,328.1	62.6	2,390.7	2.7	0.1	2.8	187.0	3.3	190.3	2,517.8	66.0	2,583.7
Total fixed local service		58,596.6	9,616.7	68,213.3	39.4	3.1	42.5	425.2	27.6	452.7	59,061.2	9,647.4	68,708.6
Mobile service (including wireless telephony, paging & messaging, and other mobile services):													
39	Monthly and activation charges	280.0	0.8	280.8	13,805.8	756.5	14,562.3	181.8	3.0	184.8	14,267.7	760.3	15,027.9
40	Message charges including roaming but excluding toll charges	187.6	16.1	203.7	13,365.2	1,174.2	14,539.4	191.0	61.8	252.8	13,743.9	1,252.1	14,995.9
Total Mobile Service		467.6	16.9	484.5	27,171.1	1,930.6	29,101.7	372.9	64.8	437.7	28,011.5	2,012.4	30,023.9
Toll service:													
41	Pre-paid calling card (including card sales to customers and to retail establishments)	8.5	16.5	25.0	0.4	0.5	0.9	168.4	761.1	929.5	177.3	778.1	955.4
42	International calls that both originate and terminate in foreign points		0.1	0.1		1.9	1.9	18.4	540.8	559.2	18.4	542.8	561.2
43	Operator and toll calls with alternative billing arrangement (credit card, collect, international call-back, etc.) other than revenue reported on line 42	449.6	40.2	489.8	12.8	8.4	21.2	2,919.8	6,286.5	9,206.4	3,382.2	6,335.2	9,717.4
44	Other switched toll service (includes MTS, 800/888 service, etc.)	8,125.3	585.7	8,711.0	503.4	322.3	825.7	13,907.1	38,616.3	52,523.4	22,535.7	39,524.4	62,060.1
45	Long distance private line services	931.4	44.2	975.6	5.9	9.6	15.4	1,339.9	6,888.5	8,228.4	2,277.1	6,942.3	9,219.4
46	Satellite services	3.2	15.3	18.5		2.8	2.8	26.9	139.5	166.4	30.1	157.6	187.6
47	All other long distance services	100.3	57.3	157.6	32.8	25.2	58.0	1,148.4	3,793.7	4,942.1	1,281.5	3,876.2	5,157.7
Total toll service (excluding Line 42 calls that both originate and terminate in foreign points)		9,618.3	759.3	10,377.5	555.2	368.8	924.0	19,510.5	56,485.6	75,996.1	29,684.0	57,613.7	87,297.7
48	Revenues used for calculating universal service contributions (Subtotal of lines 34 through 41 and lines 43 through 47)	68,682.5	10,392.9	79,075.4	27,765.7	2,302.6	30,068.2	20,308.5	56,578.0	76,886.5	116,756.7	69,273.5	186,030.1

Revenue for Telecommunications Service Providers that filed a Universal Service Worksheet or a TRS Worksheet		Table 1.5: Revenue by Service Category for 1997 (Amounts shown in millions) - continued -											
		Sales by Local Service Providers			Sales by Wireless Service Providers			Sales by Toll Service Providers			Sales by All Reporting Companies		
		Intrastate	Interstate	Total	Intrastate	Interstate	Total	Intrastate	Interstate	Total	Intrastate	Interstate	Total
FCC 457 Line #													
Gross Telecommunications Revenues Reported on Universal Service Worksheets:													
	Carrier's Carrier Revenue -- service provided to other universal service contributors for resale	11,250.8	17,610.6	28,861.3	2,467.6	271.0	2,738.5	2,378.6	8,281.3	10,659.9	16,096.9	26,162.9	42,259.8
42	International calls that both originate and terminate in foreign points		0.1	0.1		1.9	1.9	18.4	540.8	559.2	18.4	542.8	561.2
48	Other end user revenue -- service provided to end users and non-contributing carriers (revenues used for calculating universal service contributions)	68,682.5	10,392.9	79,075.4	27,765.7	2,302.6	30,068.2	20,308.5	56,578.0	76,886.5	116,756.7	69,273.5	186,030.1
	Gross telecommunications revenue: Carrier's carrier, international-to-international and other end user revenue	79,933.2	28,003.6	107,936.8	30,233.2	2,575.4	32,808.6	22,705.5	65,400.2	88,105.6	132,871.9	95,979.2	228,851.1
49	Enhanced services, billing and collection, customer premises equipment, published directory and non-telecommunications service revenue			9,121.3			5,772.1			10,739.7			25,633.2
50	Gross billed revenue from all sources			117,058.2			38,580.8			98,845.3			254,484.2
TRS Worksheet Data													
Revenues reported by service providers that filed TRS Worksheets but not Universal Service Worksheets:													
	Sales to contributing carriers and international- to-international revenue **	241.8	174.4	416.2	88.6	9.8	98.5	136.7	819.0	955.7	467.1	1,003.2	1,470.4
	Sales to end users and contributing carriers **	128.3	86.5	214.8	91.4	31.6	123.0	95.7	413.4	509.1	315.4	531.5	846.8
	Total telecommunications revenue not included on Universal Service Worksheets	370.2	260.8	631.0	180.0	41.4	221.4	232.3	1,232.4	1,464.8	782.5	1,534.7	2,317.2
Total Telecommunications Revenue for all Telecommunications Service Providers Including Data from both Universal Service and TRS Worksheets		\$80,303.4	\$28,264.4	\$108,567.8	\$30,413.2	\$2,616.8	\$33,030.0	\$22,937.8	\$66,632.6	\$89,570.4	\$133,654.4	\$97,513.9	\$231,168.3

Note: Figures may not add due to rounding.

* Denotes figures greater than \$0 but less than \$50,000.

** Breakouts based on staff analysis.

Revenue for Telecommunications Service Providers that filed a Universal Service Worksheet or a TRS Worksheet	Table 1.6: Revenue by Type of Filer for 1997 (Amounts shown in millions)												
	Data filed on Universal Service Worksheets												
	Carrier's Carrier Revenue				End User Revenue **						Total Telcom.**	Other Revenue	Gross Revenue
	Local	Mobile	Toll	Total	Local	Mobile	Toll	Intrastate	Interstate	Total			
Regional Bell Operating Companies	\$16,986.6	\$221.2	\$242.0	\$17,449.8	\$52,006.2	\$96.1	\$7,305.2	\$51,683.8	\$7,723.8	\$59,407.6	\$76,857.4	\$5,226.9	\$82,084.4
Other Incumbent Local Exchange Carriers (ILECs)	9,950.7	9.1	143.4	10,103.2	14,910.6	264.0	2,498.1	15,597.2	2,075.4	17,672.6	27,775.7	3,266.8	31,042.5
All ILECs	26,937.3	230.3	385.4	27,553.0	66,916.8	360.1	9,803.3	67,281.0	9,799.2	77,080.2	104,633.2	8,493.7	113,126.9
Pay Telephone Service Providers	154.2		143.7	297.9	466.1		108.7	525.2	49.7	574.9	872.8	50.5	923.2
Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs)	900.8		48.9	949.7	631.5	2.2	286.2	555.4	364.5	919.9	1,869.7	54.5	1,924.2
Local Resellers	1.9			1.9	73.3	117.3	13.3	179.0	24.9	203.9	205.8	40.5	246.3
Private Carriers	0.8	2.0	22.5	25.3	14.7	4.9	67.5	22.4	64.7	87.1	112.3	249.2	361.5
Shared Tenant Services Providers	0.2				29.9	*	56.9	37.9	48.9	86.8	87.0	114.0	201.0
Other Local Exchange Carriers	21.1	0.1	12.1	33.3	81.0	*	41.7	81.6	41.1	122.7	156.1	119.0	275.0
Local Service Providers Other Than ILECs and Pay Telephone Providers	924.8	2.1	83.5	1,010.4	830.4	124.4	465.6	876.3	544.1	1,420.4	2,430.9	577.2	3,008.0
Local Service Providers	28,016.4	232.4	612.6	28,861.4	68,213.3	484.5	10,377.5	68,682.5	10,392.9	79,075.4	107,936.8	9,121.3	117,058.2
Wireless Telephony including Cellular, Personal Communications Service (PCS) and SMR - Telephony Carriers	33.4	2,064.2	199.8	2,297.4	38.2	26,570.7	897.4	25,643.7	1,862.6	27,506.3	29,803.7	4,287.2	34,090.8
Paging Services Providers		426.7	0.1	426.8	4.3	2,352.5	6.5	2,072.3	291.1	2,363.4	2,790.1	1,446.7	4,236.8
SMR Dispatch & Other Mobile Services Providers		11.3	3.2	14.5		178.4	20.1	49.6	148.9	198.5	214.9	38.2	253.1
All Wireless Service Providers	33.4	2,502.1	203.0	2,738.5	42.5	29,101.7	924.0	27,765.7	2,302.6	30,068.2	32,808.6	5,772.1	38,580.8
Interexchange Carriers (IXCs)	47.7	0.7	8,736.1	8,784.5	185.3	377.3	69,311.5	17,887.7	51,986.4	69,874.1	78,891.8	8,349.7	87,241.5
Operator Service Providers (OSPs)	2.4		35.2	37.6	41.0	1.7	493.1	263.7	272.0	535.7	573.6	95.0	668.5
Pre-paid Calling Card Providers	0.3		60.9	61.2	0.1		434.7	42.1	392.8	434.9	497.0	23.3	520.3
Satellite Service Carriers			577.2	577.2	0.6	0.3	96.1	1.8	95.2	97.0	674.3	2,073.5	2,747.8
Toll Resellers	21.9	0.9	1,015.4	1,038.2	224.6	57.7	5,557.0	2,092.5	3,746.9	5,839.3	7,142.7	153.5	7,296.2
Other Toll Carriers	0.1		161.1	161.2	1.0	0.6	103.8	20.8	84.7	105.5	326.2	44.8	371.0
All Toll Service Providers	72.4	1.6	10,585.8	10,659.8	452.7	437.7	75,996.1	20,308.5	56,578.0	76,886.5	88,105.6	10,739.7	98,845.3
All Interstate Service Providers	\$28,122.2	\$2,736.2	\$11,401.4	\$42,259.8	\$68,708.6	\$30,023.9	\$87,297.7	\$116,756.7	\$69,273.5	\$186,030.1	\$228,851.1	\$25,633.2	\$254,484.2

Revenue for Telecommunications Service Providers that filed a Universal Service Worksheet or a TRS Worksheet	Table 1.6: Revenue by Type of Filer for 1997 (Amounts shown in millions) - continued -												Revised 10/22/98
	Data filed on TRS worksheets by Carriers that did not also file USF worksheets (Gross Revenue)						All Telecommunications Service Providers **						
	Local	Mobile	Toll	Intrastate	Interstate	Total	Local	Mobile	Toll	Intrastate	Interstate	Total	
Regional Bell Operating Companies							\$68,992.8	\$317.3	\$7,547.2	\$57,475.1	\$19,382.4	\$76,857.5	
Other Incumbent Local Exchange Carriers (ILECs)	\$493.3	\$0.5	\$26.6	\$304.3 r	\$216.1 r	\$520.4	25,354.6	273.6	2,668.1	20,392.8	7,903.4	28,296.2	
All ILECs	493.3	0.5	26.6	304.3 r	216.1 r	520.4	94,347.4	590.9	10,215.3	77,867.8	27,285.7	105,153.5	
Pay Telephone Service Providers	4.1	0.3	56.3	50.5 r	10.1 r	60.6	624.4	0.3	308.7	815.2	118.2	933.4	
Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs)	48.6		0.8	15.4 r	34.0 r	49.4	1,580.9	2.2	335.9	1,269.8	649.2	1,919.0	
Local Resellers							75.2	117.3	13.3	180.9	24.9	205.8	
Private Carriers	*			*		*	15.5	6.9	90.0	27.5	84.9	112.4	
Shared Tenant Services Providers							30.1	*	56.9	38.1	48.9	87.0	
Other Local Exchange Carriers	0.6			0.0	0.6 r	0.6	102.7	0.1	53.9	104.1	52.6	156.7	
Local Service Providers Other Than ILECs and Pay Telephone Providers	49.2	0.0	0.8	5.3 r	44.7 r	50.0	1,804.4	126.5	550.0	1,620.4	860.5	2,480.9	
Local Service Providers	546.5	0.8	83.7	370.2 r	260.8 r	631.0	96,776.2	717.7	11,073.9	80,303.5	28,264.4	108,567.9	
Wireless Telephony including Cellular, Personal Communications Service (PCS) and SMR - Telephony Carriers	6.3	131.6	2.6	126.5 r	13.9 r	140.4	77.9	28,766.5	1,099.8	27,862.6	2,081.4	29,944.0	
Paging Services Providers	0.4	48.7	22.2	45.2 r	26.1 r	71.3	4.7	2,827.9	28.8	2,487.4	374.0	2,861.4	
SMR Dispatch & Other Mobile Services Providers	0.5	8.3	0.9 *	8.4 r	1.4 r	9.8	0.5	198.0	26.1	63.2	161.5	224.7	
All Wireless Service Providers	7.2	188.6	25.7	180.0 r	41.4 r	221.4	83.1	31,792.4	1,154.6	30,413.3	2,616.9	33,030.2	
Interexchange Carriers (IXCs)	0.7	*	187.8	44.4 r	144.1 r	188.5	233.7	378.0	78,468.6	20,030.0	59,050.3	79,080.3	
Operator Service Providers (OSPs)	3.4		26.0	13.9 r	15.5 r	29.4	46.8	1.7	554.5	279.2	323.7	602.9	
Pre-paid Calling Card Providers			21.7	6.5 r	15.2 r	21.7	0.4		518.1	50.3	468.3	518.6	
Satellite Service Carriers			336.6	24.7 r	311.9 r	336.6	0.6	0.3	1,010.0	26.6	984.2	1,010.8	
Toll Resellers	22.5		844.4	134.1 r	732.8 r	866.9	269.0	58.6	7,663.6	2,512.6	5,497.1	8,009.7	
Other Toll Carriers	15.1		6.6	8.8 r	12.9 r	21.7	16.2	0.6	331.1	39.2	308.7	347.9	
All Toll Service Providers	41.7	*	1,423.1	232.4 r	1,232.4 r	1,464.8	566.8	439.3	88,545.8	22,937.9	66,632.5	89,570.4	
All Interstate Service Providers	\$595.4	\$189.4	\$1,532.4	\$782.5 r	\$1,534.7 r	\$2,317.2	\$97,426.2	\$32,949.5	\$100,774.3	\$133,654.5	\$97,513.9	\$231,168.4	

Note: Figures may not add due to rounding.

" r " indicates revised figure

* Denotes figures greater than \$0 but less than \$50,000.

** End user revenue excludes international-to-international revenue (see Line 42, Table 6). International-to-international revenue is included in total telecommunications revenue reported by Universal Service Worksheet filers and in revenue amounts shown for all telecommunications services providers.

Table 1.7: Universal Service Program Requirements and Fund Factors: 1998

(Amounts shown in millions)

	First Quarter	Second Quarter	Third Quarter	Fourth * Quarter	1998
High Cost and Low Income Support Mechanisms					
Interstate and international end user revenues	(First half 1997 Revenue)		(Second Half 1997 Revenue)		
Reported contribution base revenues	\$35,001	\$35,303	\$34,719	\$34,228	
Adjustment for uncollectibles				1.0%	
Contribution base at the time the factor was calculated	\$35,001	\$35,303	\$34,719	\$33,885	
Projections of demand and administration expenses at the time the fund factors were adopted					
High Cost					
Program demand	\$434.0	\$431.1	\$414.1	\$422.5	
Administrative	\$1.1	\$0.9	\$0.8	\$1.9	
Interest income	(\$1.0)	(\$0.9)	(\$0.7)	(\$0.7)	
Total	\$434.1	\$431.1	\$414.2	\$423.7	
Low Income					
Program demand	\$125.0	\$122.3	\$125.3	\$116.4	
Administrative	\$0.6	\$0.4	\$0.4	\$0.3	
Interest income	(\$0.3)	(\$0.3)	(\$1.0)	(\$1.0)	
Total	\$125.3	\$122.4	\$124.7	\$115.8	
Total High Cost and Low Income	\$559.4	\$553.5	\$538.9	\$539.4	\$2,191.2
Contribution factor	0.0319	0.0314	0.0314	0.0318	
Contribution factor times 1/2 of contribution base	\$558.3	\$554.3	\$545.1	\$538.8	\$2,196.4
Actual contribution amounts billed to carriers during quarter					
High Cost	\$438.7	\$433.1	\$409.1	\$411.3	
Low Income	\$126.6	\$123.0	\$123.2	\$112.2	
Refunds	\$0.0	\$0.0	(\$0.9)	(\$1.2)	
Total	\$565.3	\$556.1	\$531.4	\$522.3	\$2,175.1
Actual requirements approved for payment					
High Cost	420.4	422.8	426.9	426.9	
Low Income	105.2	112.8	118	135.5	
Total	525.6	535.6	544.9	562.4	\$2,168.5
Schools, Libraries & Rural Health Support Mechanisms					
Local, Interstate and International End User Revenue	(First half 1997 Revenue)		(Second Half 1997 Revenue)		
Reported contribution base revenues	\$89,827	\$92,186	\$94,066	\$94,482	
Adjustment for uncollectibles				1.0%	
Contribution base at the time the factor was calculated	\$89,827	\$92,186	\$94,066	\$93,537	
Projections of demand and administration expenses at the time the fund factors were adopted					
Schools & Libraries					
Program demand	\$299.3	\$322.4	\$690.0	\$320.1	
Administrative	\$2.7	\$4.4	\$4.4	\$4.9	
Interest income	(\$2.0)	(\$1.8)	\$0.0	\$0.0	
Total **	\$300.0	\$325.0	\$325.0	\$325.0	
Rural Health					
Program demand	\$23.0	\$23.2	\$24.3	\$24.3	
Administrative	\$2.2	\$1.9	\$1.2	\$1.5	
Interest income	(\$0.2)	(\$0.1)	(\$0.5)	(\$0.8)	
Total **	\$25.0	\$25.0	\$25.0	\$25.0	
Total Schools & Libraries, and Rural Health Care	\$325.0	\$350.0	\$350.0	\$350.0	\$1,375.0
Contribution factor	0.0072	0.0076	0.0075	0.0075	
Contribution factor times 1/2 of contribution base	\$323.4	\$350.3	\$352.8	\$350.8	\$1,377.2
Actual contribution amounts billed to carriers during quarter					
Schools & Libraries	\$306.8	\$325.7	\$326.6	\$322.6	
Rural Health	\$25.6	\$25.1	\$25.1	\$24.8	
Refunds	\$0.0	\$0.0	(\$0.3)	(\$0.9)	
Total	\$332.4	\$350.8	\$351.4	\$346.5	\$1,381.1
Actual requirements approved for payment					
Schools & Libraries	\$0.0	\$0.0	\$0.0		
Rural Health	\$0.0	\$0.0	\$0.0		
Total	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0

* Billings shown for fourth quarter represent projected billings.

** In some cases the total represents a capped amount rather than the sum of the requirements.